



United States
Department of
Agriculture

Forest
Service

National Forests in North Carolina
Supervisor's Office

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File Code: 2580-2

Date: October 9, 2007

Keith Overcash
NC Dept. of Environmental and Natural Resources
Division of Air Quality
2728 Capital Blvd.
Raleigh, NC 27604

Dear Mr. Overcash:

On August 8, 2007, we received a draft implementation plan from the State of North Carolina that describes your proposal to improve air quality regional haze impacts at mandatory Class I areas in your state. We appreciate the opportunity to work closely with the State through the initial evaluation, development, and now, subsequent review of this plan. Cooperative efforts such as these ensure that, together, we will continue to make progress toward the Clean Air Act's goal of natural visibility conditions at our Class I wilderness areas and parks.

This letter acknowledges that the U.S. Department of Agriculture, U.S. Forest Service has received and conducted a substantive review of your proposed Regional Haze Rule implementation plan. Please note, however, that only the U.S. Environmental Protection Agency (EPA) can make a final determination about the document's completeness, and therefore, only the EPA has the ability to approve the document. The Forest Service's participation in the State of North Carolina's administrative process does not waive any legal defenses or sovereignty rights it may have under the laws of the United States, including the Clean Air Act and its implementing regulations.

Our review focused on eight basic content areas which reflect priorities for the Forest Service. We have attached comments to this letter. We look forward to your response required by 40 CFR 51.308(i)(3). For further information, please contact Bill Jackson, Air Quality Specialist, at (828) 257-4815 or Charles Sams, Regional Air Quality Program Manager, at (307) 578-8241.

Again, we appreciate the opportunity to work closely with the State of North Carolina. The Forest Service compliments you on your hard work and dedication to significant improvement in our nation's air quality values and visibility.

Sincerely,

MARISUE HILLIARD
Forest Supervisor

cc: Charles E Sams, Ann E Mebane

Enclosure



National Forests in North Carolina Comments NC Haze Implementation Plan

1. The SIP does not discuss how emissions from sources in North Carolina will affect visibility in Class I areas outside of North Carolina; specifically James River Face and Cohutta Wildernesses. The information is contained in the Area of Influence (AOI) analyses and it would be appropriate to discuss how emissions reductions planned for North Carolina sources will affect visibility at Class I areas in other states. There are three sections of the Regional Haze Rule that we believe support our request:
 - a. 51.308 (d)(3) Long term strategy. "Each State... must submit a long-term strategy that addresses regional haze visibility impairment...for each mandatory Class I Federal area located outside the State which may be affected by emissions from the State. The long-term strategy must include enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals established by States having mandatory Class I Federal areas."
 - b. 51.308 (d) (3) (i) "Where the State has emissions that are reasonably anticipated to contribute to visibility impairment in any ... Class I area located in another State..., the State must consult with the other State(s) in order to develop coordinated emission management strategies."
 - c. 51.308 (d) (3) (ii) "If the State has participated in a regional planning process, the State must ensure it has included all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process."
2. The document should list all of the BART eligible sources (inside and outside of North Carolina) that could impact the Class I areas in North Carolina, and the results from the final BART determinations. The results should include a table of the emissions before and after BART controls are installed.
3. Sulfur dioxide emissions (compiled by VISTAS) from Blue Ridge Paper are projected to increase from 2002 estimates and be about 10,150 tons in 2018. The VISTAS AOI analysis supports that Blue Ridge Paper has the greatest potential to impact visibility at Shining Rock Wilderness using 2018 emissions estimates. Our CALPUFF analysis of **all** the emissions (for 2005) from this facility indicate it is causing a 1 dv or greater impact to Shining Rock for more than 200 day each year, with the 20th percentile change of approximately 30 dv (Table 1). Currently, the VISTAS analysis is predicting about a 6 dv improvement in visibility at the Class I areas in western North Carolina. Making significant sulfur reductions at the Blue Ridge Paper Facility alone may improve visibility more than 6 dv.

Table 1. Predicted impacts to visibility^{*/} at Shining Rock Wilderness (deciview (dv)) utilizing 2005 Blue Ridge Paper emission estimates and 2001 through 2003 meteorological data.

Year	Number of days ≥ 1 dv	20th Percent Worst (Δdv)
2001	258	29.0
2002	275	29.3
2003	279	32.5

^{*/} Visibility estimates were obtained by using the VISTAS CALMET meteorological data, and the VISTAS version of the CALPUFF atmospheric dispersion model. Modeling parameters were set following the VISTAS BART modeling protocol.

We believe emissions reductions at Blue Ridge Paper should be accomplished before 2018 because emissions from this facility clearly have a significant impact to visibility at Shining Rock Wilderness. The main sulfur dioxide emission sources at the facility are very old (perhaps installed when the facility was built) and there is no forecasted date of when the equipment will be replaced. Blue Ridge Paper does utilize coal washing and burns low sulfur fuel, so the only other sulfur dioxide reduction techniques examined was to install pollution control devices. There is a potential that installing pollution control devices on the existing boilers could result in greater visibility impacts (as was noted in the BART analysis) if the stack temperatures and/or gas exit velocities are lowered. Therefore, we believe it is important to take time and carefully look at all possible means to significantly reduce sulfur dioxide emissions at Blue Ridge Paper. The emission reduction techniques examined need to consider at a minimum the following: manufacturing efficiencies, fuel switching, and installing one or more appropriate control devices. We are recommending a facility-wide emission reduction plan be developed by 2013 and the emission control measures be fully implemented before 2018.

4. As stated in the draft SIP, we agree with your finding that wildland fires emissions are not a significant contributor to visibility impairment at the Class I areas (page 86) and further emission reduction techniques from prescribed fires are not needed before 2018. Based upon this finding, it appears the current prescribed fire smoke management techniques implemented in North Carolina are adequate to protect visibility in the Class I areas. If you concur, we suggest your agency note this finding in the final SIP. Also, you may want to note that your agency and the North Carolina prescribed fire community are continuing to work together to refine the smoke management techniques to address ecological, human health and welfare needs.

On October 3, 2007, we discussed with your staff if the North Carolina Smoke Management Program (SMP) should be included as an Appendix or referenced in the Regional Haze SIP (as on page 86). As we agreed in our conversation, any reference or citation of the SMP should maintain maximum flexibility to modify the North Carolina SMP on an as needed basis without having to go through a SIP revision, or waiting for long periods of evaluation such as prescribed by the Regional Haze review cycle.